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EDITORIAL COMMENT

It goes without saying that we at Computer News hope everyone has a happy and safe holiday season. And as Rita Laws says "because the Holiday season is upon us" she has been "thinking - Food." And thus, we have a fattening, but delicious article from her about her surfing in a sea of Chocolate.

In speaking about surfing the bulletin boards and the Internet keep in mind that you do not need to have an expensive computer setup access this vast world of information. A used Radio Shack TRS-80, or a Tandy Model 1000, or an IBM clone, an XT or AT, a 286 or 386, or even a Commodore or Amiga of the oldest vintage and a modem will allow you to communicate with some of the largest computer systems in the world over your phone line. We do suggest that you have at least a 2400 baud rate modem or faster to access any bulletin board if calling long distance.

What a perfect Christmas gift to one of your children a used computer would make. It would give them hours and hours of entertainment. While at the same time giving them an education that they didn't even know they were getting while they "thought" they were "just having fun." Just think about how many toy walkie-talkies were sold so the kids could play away talking to their friend in the next room or next door. With a computer in hand you are preparing them for the world that they are going to have to live in as adults. It is never too early to get them started - without investing a fortune.

Give a kid a used computer.

GET ORGANIZED FOR THE NEW YEAR-THEN INDULGE!

by Rita Laws

There are four award-winning shareware programs that will make your Holidays merrier. The first will help you organize your life, the second will create your annual Christmas or Hanukkah letter, the third will help you keep your New Year's resolution to safely free up hard drive space, and the fourth will allow you to reward yourself for getting through the busiest time of year in one piece! And, as always, the latest versions of each of these shareware programs is available right here through Computer News PC.

You've got your Oscar, your Grammy, and your Emmy, and now you have your shareware awards. The Shareware Industry Awards, a two-year old shareware industry group, has honored all four of these programs as being among the year's best in their prospective software categories.

The first winner. in business and finance program category, is the latest version of a popular PIM, or Personal Information Manager. Called Above and Beyond (WINDOWS), it has features you'd expect to find in the commercial equivalent. Above and Beyond has pop-up calendars that display everything you need to do a week or month in advance. There are alarms and a place to record all your vital information, including an address book.

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SHOPPERS GUIDE

by Dale Hill

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features allow you to save modified files to a floppy so that you can quickly update the program on your laptop or work computer. And if you assign a value to each of the items on your To Do list, Above and Beyond will automatically juggle them to help you accomplish first things first.

If one of the items on your To Do list involves creating documents, newsletters or a Holiday letter for family and friends, you've got to try Neobook Pro. It looks and acts like a WINDOWS program, but is actually DOS-based. This makes your document look like a magazine page, but also includes multimedia effects capability and a way to turn your completed project into an .EXE file. In this way, anyone receiving your document can run it as a program instead of finding the right association in which to read it, and the reader will not need to own a copy of Neobook Pro to execute document. The graphics tools are easy to use especially for anyone with word processing programs. With Neobook Pro, you won't have to waste money on expensive store-bought Christmas cards this year.

You can add to the money saved on holiday cards by saving on the cost of a larger hard drive, too, thanks to the new WinZIP. WinZIP is a newly-improved WINDOWS shell for compression/decompression programs. WinZIP easily unzips files such as shareware programs, and zips others you may not use frequently, thus freeing up precious hard drive space. Unlike some disk compression programs, WinZIP's zipped directories won't create havoc with the general operation of your computer or the execution of any other program.

A nifty feature is the peek-a-boo capability that allows you to see what's in a zipped program before you even open it. You can even run it before deciding if you want to bother with unzipping it. A new plus is WinZIP's uninstall

feature. WinZIP will now uninstall those programs you no longer want on your hard drive. In short, the new WinZIP is the overall shareware manager.

By now, you've gotten organized, sent your Holiday letters, saved some money, and freed up hard drive space. It's time to indulge.

You deserve a reward. How about a good movie? The fourth award- winner will help you choose a good one. Called Movies To Go, this colorful, user-friendly data base contains reviews of a thousand movies from beloved classics right up to Ace Ventura, Pet Detective. Hollywood movie data base software is hot right now in the retail market and expensive. Using this more basic shareware equivalent for awhile will help you decide if these types of programs are truly helpful or not.

Movies To Go lists stars, year, director, cast, rating, and more. You can look up all the movies of one director or star, or you can read up on just one film. Either way, the concise plot summaries and reviews will help you save time at the video rental store. They will also save you money by lessening your chances of renting a bomb.

So, even in indulging yourself for saving time and money, you've saved time and money. How about another reward? It's not an industry award-winner, but it's fun, and it will make you VERY popular with your kids, grandkids- virtually every child in the United States. Best of all, it's free with any Wyoming shareware order a limited time to CNPC Subscribers, windows required]. Your reward is a sound clip of the popular Power Rangers as they morph into their superhero alter egos. Try placing this .wav file in your WINDOWS directory and then set it up at the SOUNDS icon within the MAIN group's CONTROL PANEL sound as you start WINDOWS. This will work whether you have a sound card or not. Then, step back and watch the expressions on little faces as they listen to those immortal words: "Mastodon!

Saber-toothed Tiger! Pteradactyl! Tyrannosaurus! Triceratops! Dragonzord!" If you're a kid, that's as good as a sound clip gets.

Happy Holidays! -Rita Laws

(Editor's Note)

You will find the programs mentioned in the above article by Rita Laws on the following Wyoming Software Disks.

ABOVE AND BEYOND Wyoming Software Disk #10180 3.50 720K or 5.25 H.D. disks only and Windows 3.1.

NEOBOOK PRO

Wyoming Software Disk # 10308 3.5 720K or 5.25 H.D disks only DOS 3.1 or higher, 640K Ram, mouse, EGA, VGA, or SVGA required.

WINZIP

Wyoming Software Disk # 10344 Windows required

MOVIES TO GO

Wyoming Software Disk # 10176 3.5 HD disk only. 640K Ram, Hard Disk with 4 meg free. Dos 2.1 or higher. DOS or Windows operation.

PRANGER.WAV

Wyoming Software Disk # 10356 File Size 55K

(PRanger.wav is free with each order for a limited time to CNPC subscribers. Because windows is required for this file please indicate if you would like a copy added to your order when ordering.)



.BAT's all, folks!

By David P. Miller

The IF ERRORLEVEL command mentioned in previous columns is provided so that you can modify the processing path of your batch file depending upon the results of execution of a DOS program. Reference material that I have available to me states that the following programs provide exit codes that can be used by the IF ERRORLEVEL command:

BACKUP DISKCOMP DISKCOPY FORMAT GRAFTABL KEYB REPLACE RESTORE XCOPY

however, I have not been able to obtain any reference documentation regarding such exit codes. Through testing, I have found that FORMAT does indeed return such codes; ERRORLEVEL 3 seems to be the result of operator intervention (pressing [CTRL]-C) and ERRORLEVEL 4 appears to result from any drive or media problem.

The return codes provided by such utility programs impart enormous potential to the ability of a batch file to perform the desired operation. Consider, for example a 'grandfather' backup strategy: After making backup copies of all your programs (which never change), the practice of maintaining three sets of diskettes and using the oldest set for each new backup provides excellent protection against hardware failure, assuming that the backup is performed on a frequent and regular basis.

By automating the data backup procedure and limiting the files to data files only, this procedure can be quite quick and painless. Such a backup procedure created within a batch file could format each diskette in the current set, XCOPY the data files from a specific subdirectory to

it, and PAUSE for the next repeating these three diskette, operations for each data subdirectory or set of data files to be copied to diskette. Knowing the return codes, the batch file writer could respond to the exit codes to determine if there was a hardware or media problem, or if the operator wished to take a specific action or abort the process. Unfortunately, without appropriate documentation the task of determining the ERRORLEVEL meanings in each case is so difficult as to make the attempted use of them unreasonable.

Because of all this, the use of the IF ERRORLEVEL command is by necessity restricted completely to checking the response of the operator after use of the CHOICE command. Since versions of MS-DOS prior to 6.0 do not include this command, I have written similar utility a Computer New-PC to distribute via The File Cabinet (or any other way the editors find appropriate), for users of earlier versions of DOS. The CHOICE.COM utility I have provided to CN-PC does not provide all of the features of the MS-DOS Version 6.0 CHOICE command (it always displays the acceptable kevstroke characters; does not display text; only accepts '0' through '9' and 'A' through 'Z'; and is not case sensitive), but otherwise acts the same and provides the same measure of utility.

As mentioned in the initial summary of Batch file commands, the CHOICE command provides several parameters to modify its' operation:

/C:keys /N /S /T:c,nn text

(CHOICE.COM provided to CN-PC only supports /C:keys and /T:c,nn.) The 'text' parameter allows display of a single line of prompting text; the /S command causes CHOICE to become case

sensitive; and the /N command prevents display of the possible keystroke choices that are acceptable.

For both versions of CHOICE, /C:keys allows the batch file programmer to specify the characters that are acceptable; /T:c,nn specifies a default response ('c') that will be assumed and acted on after a set time period ('nn' seconds); and default responses of 'Y' and 'N' will be used if /C:keys is not specified.

CHOICE sets the exit code to the position of the character, counting from left to right in the /C:keys parameter. Thus if the parameter:

/C:ABCD

was specified, a user response of 'A' would return an exit code of 1, 'B' a code of 2, 'C' a code of 3, and 'D' a code of 4. Any other key would not be accepted. Additionally if the parameter:

/T:D,10

was used, the batch file would proceed (after waiting ten seconds with no user response) as if the user had keyed in the letter 'D'.

This command, in conjunction with the IF ERRORLEVEL command permits construction of user response processing (for AUTOEXEC.BAT, in this case) such as that in the following example:

@ECHO OFF
ECHO Press '1' for Windows
ECHO Press '2' for DOS
ECHO Press '3' for Accounting
CHOICE /C:123 /T:2,10
IF ERRORLEVEL 3 GOTO
TURNKEY
IF ERRORLEVEL 2 GOTO
DOS

REM Assume Windows selected
C:\MOUSE\MOUSE.COM

WIN
EXIT
TURNKEY:

C:\ACCTG\BOOKS,EXE DOS: CLS

This example assumes that MOUSE.COM resides the C:\MOUSE subdirectory and is required for Windows, and that a dedicated accounting program called BOOKS.EXE resides in a C:\ACCTG subdirectory. The default response of '2' would be used after ten seconds if no key was pressed, and would simply clear the screen and proceed to the C:\ prompt.

I would like to thank those of you that have written about this series on batch file programming. Your comments and questions are appreciated; they help me tailor the articles to the needs of CN-PC subscribers and let me know that the information presented is useful to some readers. As the CN-PC staff has frequently mentioned. Computer News-PC is YOUR magazine; input to the editors determines the direction that articles will take. Good or bad, don't hesitate to contact the CN-PC editors! (Just don't be indifferent!) -David P. Miller

DIRECT ACCESS A REVIEW by CNPC

Ever since we acquired our first MS-DOS based machine we, like everyone else, had to battle to remember all the DOS commands to make the computers do what we wanted them to. Trying remember which directory an application file was stored in and what the command was used to start the application program was probably the worst part of it. And trying to remember all the switch commands to perform such simple tasks as reading a directory on a disk. Reading a directory is easy

you just enter the current drive, -:A, or :B, or :C, or :D or e,f,i,g,h etc. Then let your eyeballs roll as fast as they can to catch all the file names (including) file extensions as they fly across the screen, top to bottom. You are really lucky when there is only one or two files on a disk, but woe to the person who tries to read a directory of a hard drive root directory! Then out comes the manual -- look for the section on the DOS command DIR. Then look for the switches that will stop the scrolling across the screen as the command reads the directory of the disk (or current directory, assuming that you figured out that you were in the current directory that had the file in it that you were looking for but just couldn't remember what the execute command was). Once you found what the stop-scoll switch ways (it happens to be /P which stands for "pause when screen is full -PLEASE"). While your at it you might notice that /o is the switch command which will read the directory in alphabetical order. (Which also stands for "Oh please let me find the name for that program file," so I can get on with my days work.)

Then reading one of the industries trade manuals one day we came across an article that suggest that anyone who had trouble with operating DOS commands should try DIRECT ACCESS. Thinking at the time that we had no trouble operating DOS commands, just that we had trouble remembering all of them that the \$100 plus price wouldn't be that much more than the cost of all the books we had on the shelf trying to tell us how to run DOS - we sent off for the program.

That program has been a God send and we have been using it ever since. We use it everyday even on our 486.whoop-te-do computers with Windows installed when you get them. Windows is still installed but the daily work horse is DIRECT ACCESS working under DOS.

WHAT IS DIRECT ACCESS

By this time you must be asking yourself "what are they talking about?"

Direct Access, published now by Symantec, of Cupertino, California, is a menu building program that provides a one-step solution to organizing your desktop computer.

The program will automatically build menus for you by recognizing over 800 applications DOS commands and organizes them into a logical menu structure. Or you can build your own menus manually if you wish. Either way Direct Access gives you a simple menu screen which allows you direct access to everything on your hard drive.

Once installed and you have listed the programs that you want to use Direct Access lets you instantly call up and run a program with only one key stroke regardless of which directory the program resides in. It does the same with one click of the Mouse if you are attached to your mouse. With the programs that we use daily we really haven't formed an attachment to our mouse, cute as it may be.

Direct access can create up to six levels of menus, with as many as 26 items per menu. In other words suppose you create a menu using the key "A" called CLIPART, and then create a set of sub-menus called FUNNY, XMAS, OFFICE, SEASONS, etc. When you press the key "A" at the main menu, the sub-menus come up on the screen and by pressing one key for Office, you will be instantly taken to the directory and into the file with the collection of clipart that you have placed your office clipart files.

The program has a feature called "Usage Tracking" whereby if you need to keep track of the amount of time you use a certain program, it will print out a report of the time used. Very handy for billing a customer that you may be doing a project for. Or just keeping track of how much time

you spend doing certain tasks.

The program also has Password Protection to guard your hard drive data from prying eyes, or to keep the kids out of a program that you don't want them to play with, like a very important spreadsheet that you have been working on. Or a game that you like to play but do not want the kids to get into.

Direct Access provides three levels of virus detection. If a virus is detected Direct Access alerts you of its presence and cautions you to take the necessary actions to eliminate it.

One press of a key, or click of a mouse you can create a main menu selection that will executed custom applications consisting of up to 30 DOS and/or batch file commands.

The program also has screen blanking which will blank the screen after a user-specified period of time. Then one touch on any key and the screen comes back up just as it was before it was blanked out

You can quickly view your hardware and hard disk information with one press of the System Information button at the main menu.

As with most programs on today's market Direct Access has plenty of online help written by the program authors, or it allows you to add your own help references for the Main Menu and Sub-menu items.

HELP IN FINDING FILES ON YOUR HARD DRIVE

The Directory Tree will locate your application files and directories. You can even select programs to be incorporated in the menu selections without having to do any typing. Again with the press of a button.

OK HOW ABOUT WINDOWS

Yes, there is also a windows version, there is also a Network version, but since few of our readers would have a Network system we will just stick to the Windows version for now.

Direct Access Windows has all

the features mentioned above, plus a few that make using Windows -Simple- which is what windows was supposed to do in the first place. With the automatic installation the program quickly builds a menu that a utomatically arranges your applications into 17 logical and immediately accessible categories. From there you can instantly launch your favorite application program with a single push of a key. You will never have to climb through clunky windows or sort through overlapping panels, ever again.

You can either replace Windows Program Manager with Direct Access Windows or choose to run it under the Windows Program Manager.

SYSTEM REQUIREMENTS For DOS version:

IBM PC/XT, PC/AT, PS2 and compatibles, 256K RAM, MS-DOS 3.0 OR higher, Hard Disk, Supports CGA,EGA,VGA graphics; color or monochrome monitors. Includes 5.25" and 3.5" disks.

For Windows version:

IBM PC/AT, 286 systems, compatibles and higher. 2Mb ram required. Microsoft Windows 3.0 or higher and MS/PC-DOS 3.3 or higher. Hard Disk, includes 5.25" and 3.5" disks.

Either program version has a suggested retail price of \$99.00 CNPC subscriber price 84.00 Purchasing Club Members 71.40 plus \$4 S&H

REMINDER

If your mailing label ends in 94/11 this is your last issue. Time to get your renewal in the mail.

MOVING?

Remember to send us your change of address.

DEATH BY CHOCOLATE - ONLINE

by Rita Laws

Since beans are vegetables, and cocoa is made from cacao beans, is chocolate a vegetable? If white chocolate is chocolate because it has cocoa butter, is suntan lotion with cocoa butter edible? Does the recipe for Death By Chocolate Cake really exist, or is it a myth? Is carob the long-predicted evil anti-chocolate? If you answered Who Cares, No, I Hope So, and Yes to the above four questions, you'll want to know what's melting online for chocoholics.

On the Internet, taste test the vummy alt.food.chocolate for the latest opinions and reassurances, for example, "Good chocolate, like pizza, is really good, but bad chocolate is still pretty good." A few other facts I've picked up there include the tidbits that chocolate covered potato chips are a coveted Eastern U.S. delicacy, and cocoa beans were once used by Indians as money. The international posters tell us that British chocolate is considered to be so bad on the European continent, that naughty Swiss children are warned to straighten up or they'll have to eat it for the rest of their lives.

Cruising the Homelife BB at Prodigy will whet any appetite- M & M's sprinkled on top of hot popcorn is to die for. There's more action on this service at the Food BB under Desserts.

Delphi's recipe replete custom forum, GO CUSTOM, is #155, Cook's Corner. The Rabbet (sic) Hutch at Custom #212 (and its board at the Internet's sister alt.religion.rabbet) is a comedy and conversation cocoa cult. From the Rabbets I learned that chocolate is actually fatal to canines. This explains why chocolate, also called FOG or Food Of the Gods, is never, ever labeled Food Of the Dogs. Rabbets inhale chocolate, well, religiously and without fear of sin. In fact, the Supreme Bean is referred to in sacramental (some

might say sacrilegious) terms. Chocolate historians know the precedent, however. Ancient Indians believed the cacao bean to have heavenly origins.

On (AOL) America On Line visit the Desserts area at The Cooking Club under the Cookbook topic, and sniff out a BB discussion called CHOCOLATE! that has been active for four years. Three deserving desserts on display include Chocolate Decadence, Church Windows, and Mississippi Mud Cake.

Go Cooks Online at Compuserve and use the search word chocolate for hundreds of uploaded recipes dating back five years. At the end of the list - what's this - two recipes for Death By Chocolate Cake, one claiming to be the Los Angeles original created by a chef!
-Rita Laws

HINTS, TIPS, and MORE FOR DOS

by Danny C. Mullen

After trying several of the following pieces of information over time and later not being able to find them, I did myself a favor and consolidated them in print. Now you get to share in that effort.

Some of the following tips may use DOS commands from earlier releases of MS-DOS or undocumented features (use at your own discretion). These were gathered from various sources so I don't claim ownership except I do seem to be the first to find the MEM /ALL undocumented feature, since I've never seen it before.

Perhaps someone reading this knows the answer to some of the unknown or other undocumented items. Also note that some may only work on certain versions of DOS.

HINTS & TIPS

- Use ATTRIB to create a hidden directory or subdirectory to keep prying eyes off private files.
- Use a hidden character (ascii code 255) to protect a directory by inserting the character in its name. Press ALT and type 255 on the numeric keypad from the DOS prompt. (the name might appear as C:\JA MES.TXT)
- Use shorter names for directories or subdirectories so you can squeeze more of them into your PATH statement. (e.g. PATH=C:\JG;C:\HT;C:\Y)
- Use SUBST to utilize an unused drive letter (e.g. X, Y, Z) for a directory name - you can save more space in your PATH statement.

(e.g SUBST X C:\GAMES)
(ex. PATH=C:\DOS;X;)

- Run DEFRAG while you sleep, since on large disks it can take several hours.

Set up a minimum configuration CONFIG.SYS and

AUTOEXEC.BAT (no TSRs or un-necessary drivers) to help DEFRAG work faster. Delete unused files first.

 Directories and subdirectories can have three-character extensions just as files do (e.g.

C:\WORDPROC.001 or D:\DATA\DATABASE.JIM)

- Use double colons :: instead of REM for remarks in BATCH files for a slight speedup since it's ignored if the line isn't a target of a GOTO statement.
- Try to put any remarks at the end of the file in BATCH files so the lines don't get processed first. This saves execution time.
- Use the semicolon; for remarks in the CONFIG.SYS file.

- If you must put remarks at the beginning of batch files, use a GOTO to pass around them. Saves some processing time.
- Delete unused or little used DOS files to save disk space such as POWER if you're using a desktop computer, DRIVER.SYS, etc., read about their use first, though, before deleting them (you can always add them back later).
- FORMAT is probably the most dangerous command if you don't pay attention or are distracted while using it. Many people will rename it to preclude the curious from destroying the data on your hard or floppy disks. Try making some short batch files that you can use for formatting data disks.
- Try using FCBS=1 (the minimum possible) in your CONFIG.SYS to save some memory. FCBs are used for older programs, newer ones usually don't.
- Try STACKS=0,0 in your CONFIG.SYS to save memory. Increase the number if you see error messages related to out of stack space.
- Use the lowest possible letter for your LASTDRIVE statement in your CONFIG.SYS file each un-needed drive letter uses more memory (e.g. if your last drive is named D use a LASTDRIVE = D statement in CONFIG.SYS).
- When using the latest version of SMARTDRIVE, you can usually have your BUFFERS = setting use a lower number without sacrificing speed, thus saving memory (SMARTDRIVE is tuned to DOS 6.2 and DRIVESPACE, and it's free)

Continued on next page.

- Use FASTOPEN when continually opening and closing the same data files since DOS can find the same files quicker. Disable FASTOPEN when defragging disks.
- In BATCH files, it's quicker to have a 'TYPE filename.txt' when listing many lines of information to the screen rather than using many ECHO commands.
- Use DOSKEY to stack several commands in one line (e.g. CLSDIRDEL *.BAK) by pressing CONTROL T between the commands to make the character). DOSKEY is a great help and time saver in re-issuing previously used commands.

DOSKEY must have already been loaded in autoexec.bat prior to using the above example.

- Use the new SCANDISK utility instead of CHKDSK it can do more and do it better.
- Use SET to increase the length of your PATH's default 127 character length by using this example:

SET PATH=%PATH%;drive: \directory\filename;

(This example adds drive:\directory\filename; to the existing PATH)

- Use SET PATH = in CONFIG.SYS instead of AUTOEXEC.BAT to make the path as long as you care you can only see 127 characters when listing it, but it's all there. Note that if you try to change it later from the DOS prompt PATH will be chopped back to 127 characters max.
- Put directories with your most-used programs at the beginning of your PATH statement so DOS can search them sooner than those near the end of the PATH.
- You can tell which version of DOS all the DOS commands were written for by listing the directory they are in. The time shown

corresponds to the DOS version (i.e. if the time shows 5:00 then it matches DOS 5.0, if it shows time 6:20 then it came with DOS 6.2 (this is undocumented).

- If you don't want extraneous info printed on your screen during bootup, try adding > NUL after the c o m m a n d s (i . e . DEVICE=C:\MOUSE > NUL) and any messages will not appear on screen. This can be used in CONFIG.SYS or

AUTOEXEC.BAT.

 Use the MOVE command to easily rename directories and subdirectories.

(ex. move c:\word c:\wp)

- Try using INSTALL or INSTALLHIGH in CONFIG.SYS to save memory use when loading TSRs. Not all programs can be INSTALLed, but it's worth trying.

(e.g. INSTALLHIGH C:\DOS\SHARE,EXE /L:500 /F:5100)

- Try using lower amounts of FILES= values in CONFIG.SYS to save memory; 8 is the minimum while an average is 20 - 30.

(ex. FILES=25)

- Use the SWITCHES=/N in CONFIG.SYS to preclude someone bypassing certain commands you want to run (thus ensuring someone can't stop your CONFIG.SYS or AUTOEXEC.BAT from running all the way through.)
- Don't name batch files the same as EXE or COM files in the same directory since DOS searches for files that have endings in the following order:

COM EXE BAT.

- Use COMMAND's /F
(undocumented) switch to
automatically answer FAIL to the
Abort, Retry, Fail message (use in
CONFIG.SYS) (ex.

shell = c:\dos\command.com c:\dos\ /E:512 /F /P)

- A shortcut to using DEL *.* is to use DEL . (no asterisks, only the period).
- To test whether a directory or subdirectory exists in a batch file use the following: IF EXIST c:\dir\subdir\NUL GOTO .. (the NUL is the key to this since NUL exists in all valid directories or subdirectories)
- Use /ALL with the MEM command to see how much HIGH memory area remains and also get a shorter listing of each type of memory you have. (UNDOCUMENTED)

(e.g. MEM /ALL)

- Many DOS commands accept a first letter as a valid switch instead of spelling the whole word (e.g. MEM /A versus MEM /ALL)
- Set up a scratch directory and point the TEMP environment variable to it so certain functions (piping) and programs can use it as a scratch pad type directory (also set TMP to same directory); don't use the ROOT directory or the DOS directory for the scratch area.(ex: SET TEMP=C:\TEM and/or SET TMP=C:\TEM)
- Instead of typing FASTHELP command try using command /? to get a quicker response (e.g. XCOPY /? instead of FASTHELP XCOPY).
- To update a file's date and time to the current value use the following: COPY /b filename+,,

(Note: filename is the name of the file to update).

- Need to build a data transfer cable for parallel or serial methods? See the INTERLNK notes in the online help file.
- Type DIR, (no space between comma and DIR) to show hidden files as well as the regular files.

- On large hard disks, considering using FDISK to divide it into several partitions (drives). One large partition can have cluster sizes of 8k and even a 3 byte file will take 8k of space. A cluster is the smallest amount of disk space that DOS can allocate on a disk. Use FDISK on EMPTY drives else you'll lose your mind when all the files, etc disappear from your hard disk.

UNDOCUMENTED COMMANDS

INSTALLHIGH } Same as INSTALL except loads into upper memory.

TRUENAME } Shows real drive and path for JOINed, SUBST, drives/network utilities.

COMMENT } COMMENT=xx tells DOS to ignore any lines following it in CONFIG.SYS that have the xx characters as their first 2 letters.

UNDOCUMENTED SWITCHES

FDISK

/MBR } Repairs a damaged Master Boot Record (MBR) by overwriting it with a fresh copy.

FORMAT

/AUTOTEST } Formats without asking all the questions.

/BACKUP } Similar to AUTOTEST but prompts for the volume label.

MEM

/ALL } Shows only totals of each type of memory, but adds a short statement telling how much HIGH MEMORY space remains.

MSBACKUP

/BATCH } Helps you avoid all the menuing by only prompting you to change disks if/when needed.

VER

/R } Gives the revision (if any) letter of DOS version.

Example: MS-DOS 6.20a (the 'a' is the revision). Also tells whether DOS is loaded into the High Memory Area.

-Danny C. Mullen

The Secret Guide to Computers

by Fred Blechman

Russ Walter has done it again! His latest 19th Edition of "The Secret Guide to Computers" is another treasure-trove of information about microcomputers - old and new alike. This amazing 8.5- by 11.5-inch 639-page illustrated tome goes back in time to discuss micros like the original Radio Shack TRS-80, the Commodore Pet, and the Apple yet covers the latest versions of DOS and Macintosh operating systems.

I've been aware of The Secret Guide since the early 1980s, but have not seen it since then until recently. Beginning with the free 17-page Edition 0 in 1972, The Secret Guide's 12 Edition in 1986 blossomed to a three-volume set. The new 19th Edition is a single 2.5-pound volume with economies of production that result single-copy price of only \$15 price with generous discounts down to \$4.95 per copy - and that's postage paid to all countries! (How can he do that?)

Walter's Guides and services have been praised on the front page of The Wall Street Journal. They've also been praised and used by CBS News, USA Today, The New York Times, PC Magazine, PC World, Infoworld, Byte, Mac User, The Australian, and dozens of other publications around the world.

The 19th edition is a MAJOR upgrade. It contains more than 10,000 improvements over the 18th edition. It is up-to-date, detailed, comprehensive, frank, and easy to

read. Kids love its easy English; adults love its ruthless truths.

Even more incredible is that Russ Walter personally offers FREE computer help on his Computer Samaritan 24-hour hotline, stating that he only sleeps lightly. He even invites "drop ins" at his home, with instructions by car or subway. (How can he do that?)

To make the 19th edition better than ever, Russ totally reorganized the Guide's contents so you can find any computer topic pronto using a front cover topic guide, a detailed Table of Contents, and a 6-page small-print Master Index. The guide is divided into 8 sections, 53 chapters in total, as shown in Table I.

The Guide analyzes the newest bargain computers and peripherals, and discloses a Secret Formula that determines the value of any modern IBM PC clone. The "Repairs" chapter includes about twice as many tricks for fixing computer problems yourself. A nasty glossary reveals the real meaning of the fine print and disclaimers at the bottom of computer ads.

Early editions of the Guide through MS-DOS up Version 5. In the 19th edition, advanced commands are included from DOS 6, 6.2, and 6.22. The 19th edition also contains new tricks for editing your CONFIG.SYS a n d AUTOEXEC.BAT files. These tricks are claimed to give you about 620K of conventional RAM free (plus many megabytes of upper and extended RAM) without buying a memory manager and without the hassles suffered by hoards of frustrated computer users! Your Windows, business software, games, and CD-ROM software will run smooth as silk. (How can he do

Other topics include: how to use the Mac's System 7 and System 7P; tricks of big word processors such as Word Perfect, Ami Pro, MS Word; tricks for using the newest DOS versions of 1-2-3 and Quattro Pro; clever techniques used by modern Excel (for Windows & Mac); how to get in business as a computer consultant; and how to fix computer problems by chatting on the phone.

Here are some reasons to buy the 19th edition: it's funny; it's easy to read; it contains tricks you can't find anywhere else; it saves you money when you buy hardware and software; it brings you up-to-date and fills in the holes in your background; it saves you the time, expense and frustration of calling tech-support staffs.

Though the 19th edition is gigantic, a single copy sells for just \$15. To pay even less, join your friends and place a group order: for 2 copies, you pay \$12 per copy; for 4 copies, you pay \$9 per copy; for 60 copies, you pay \$6 per copy; for 666 copies, you pay \$4.95 per copy shipping included! (How can he do that?)

Here's more incredible news. You may reprint all or part of this book free, without paying royalties! Just phone Russ Walter first, send him one copy of your reprint, and your reprint with acknowledgment paragraph copied from page 9 of the Guide. To assist you in doing this, you can request the entire Guide on disks (same price as a book), so long as you specify disk capacity (360K, 1.2M, 720K, or 1.44M) and which format (Word Perfect 5.1 or ASCII). The disks include 62 files totaling over 3 megabytes. If you get the book on disks, get at least one book on paper since the disks do not contain headlines, graphics, special symbols, and printer drivers.

Who is this guy Russ Walter, anyhow? In this self-question "interview," condensed from pages 8 and 9 of the Guide, and reprinted here with permission, you'll get some insight...

* Why did you write the Secret Guide? I saw my students spending too much effort taking notes, so I made up my own notes to hand them. Over the years, my notes got longer, so that the 19th edition totals 639 pages. Each time I develop a new edition, I try to make it the kind of book I wish I had when I was a student.

* What does the Guide cover? Everything. Every computer topic is touched on, and the most important topics are covered in depth.

* Who reads the Guide? All sorts. Kids read it because it's easy; computer professionals read it because it contains lots of secret tidbits you can't find anywhere else.

* Why do you charge so little? I'm not trying to make a profit. I'm just trying to make people happy by charging as little as possible, while still covering my expenses. Instead of "charging as much as the market will bear," I try to "charge so little that the public will cheer."

* Do you really answer the phone 24 hours a day? When do you sleep? When folks call in the middle of the night, I wake up, answer their questions, then go back to bed. I'm near the phone 85% of the time. If you get no answer, I'm out on a brief errand, so please call again. If you get an answering machine, I'm out on a longer project: just leave your number and I'll call you back at my expense, even if it's long distance.

* Why do you give phone help free? Are you a masochist, a saint, or a nut? I give the free help for three reasons: I like to be a nice guy; it keeps me in touch with my readers, who suggest how to improve the Guide further; and the happy callers tell their friends about me, so I don't have to spend money on advertising.

* At computer shows, do you really appear as a witch? I wear a witch's black hat and red kimono over a monk's habit and roller skates, while my white gloves caress an African spear. Why? Because it's fun!

* Did you write the whole Guide yourself? Yes, but I received many suggestions from my readers, friends, and staff, who also contributed some examples and phrases.

* What's your background? I got degrees in math and education from Dartmouth and Harvard, taught at several colleges (Wellesley, Wesleyan, and Northeastern), and was a founding editor of Personal Computing magazine. But most of my expertise comes from spending long hours every day reading computer books and magazines, discussing computer questions on the phone, and analyzing the philosophy underlying the computer industry.

And here are excerpts of Russ Walter's "bio," in his own inimitable words:

"The author, Russy-poo, was conceived in 1946. So was the modern ("stored-program") months later, Nine computer. Russy-poo was hatched. The modern computer took a few years longer, so Russ got a head start. But the computer quickly caught up. Ever since, they've been racing against each other, to see who's smartest. The race is close, because Russ and the computer have so much in common. Folks say the computer "acts human" and say Russ's personality is "as a dead as a computer".

"To try beating the computer, Russ got his bachelor's degree in math from Dartmouth in 1969 and sadly remained a bachelor ever since (unless you count the computer he got married to). After Dartmouth, he got an M.A.T. in education from Harvard. math Since he went to Harvard, you know he's a genius. Like most genii, he achieved the high honor of being a junior-high teacher. After his classes showered him with the Paper Airplane Award, he moved on to teach at an exclusive private school for girls who were very exclusive. ("Exclusive" means everyone can come except you.)

"After teaching every grade from 2 through 12 (he taught the 2nd-grade girls how to run the computer, and the 12th graders less intellectual things), he fled reality by joining Wesleyan University's math Ph.D. program in

Connecticut's Middletown (the middle of Nowhere), where after 18 months of highbrow hoopla he was seduced by a computer to whom he's now happily married.

"Russ moved with his electrifying wife to Northeastern University in Boston (home of the bean and the cod), where he did a hilarious job of teaching in the naughty Department of "Graphic Science". After quitting Northeastern and also editorship of Personal Computing, he spends his time now happily losing money by publishing this book.

"Since his wife was lonely, he bought her 40 computers to keep her company, with names such as "Aphrodite "Anita Atari." the Apple," "Baby Blue Burping Bonnie," "Coco the Incredible Clown," "Jack the Shack," "Kooky Casio," "Slick Vic," and "Terrible Tina with her Texas Instruments." He hid them in a van and drove them around the country, where they performed orgies and did a strip tease, to show students a thing or two about computer anatomy."

To order books, disks, or to request more information, call Russ Walter at (616)-666-2666. For a single copy, send \$15 check, money order, or cash (US dollars) to: The Secret Guide to Computers, 22 Ashland St., Floor 2, Somerville, MA 02144-3202.

-Fred Blechman

JOIN US ON THE INTERNET

If you have access to the Internet service check in on the newsgroup

comp.sys.tandy

a discussion group for Tandy Computers new and old. Or ask your local BBS to carry it for you. If not available to you. You will find it on Chicago Syslinks 708-795-4442 Main Number 708-795-4456 for 14,400bps V.42bis 708-795-4458 for 28,800bps V.34

George Matyaszek (Sysop) in operation since 1981 (\$20 per year).

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MODEL 1000 PRINTER CABLES

by CNPC

If you have ever purchased a new printer for your Model 1000 computer and it came with a cable, you soon found out that the cable did not fit your Model 1000 if it had a card edge style connector.

IBM and IBM/clone computers have a DB25 printer port connector on them and the IBM style printer cables which are usually round come with a DB25 connector on the computer end of the cable and a 36 pin centronics connector on the end that plugs into the printer.

We have always carried the flat ribbon style cable with the 34 pin edge card connector on the computer end and the 36 pin centronics connector on the printer end.

These cables fit the Radio Shack Model I, III or 4 or Model 1000 computers and any printer which has the standard centronics parallel connectors for the printer cable.

All third party printer manufacturers today, provide the centronics parallel printer connector as an industry standard.

If you need a printer cable for your Model 1000 that has the correct connectors for both the computer and the printer they are available:

6 ft. Printer Cable \$ 12.95 (Z)
12 ft. Printer Cable 15.00 (Z)
(See our Product Guide for S&H.)



DB 25 Connector - for IBM



Card Edge Connector - for 1000s

CHKBOOK.BAS STATEMNT.BAS

by Robert Knowles

(Program Listing Number One and Two.)

CHKBOOK.BAS is a program that I wrote for the Tandy modal 4, this program will save a lot of time in doing your check book, so I converted it to Qbasic. I don't think you will have any trouble converting my Qbasic to GWbasic or basicA, it's such a handy program to have I would give it a try. There is another program for doing your statement that goes with this.

I chose 9 for screen resolution. You should tell the computer which resolution to use, why? All you have to do is leave it out to see why, it is better for you to see it than if I were to tell you why. I used 4 and 7 for colors. To my eye red on grey really stands out, and anything that makes it easier is the thing to do.

You input the last time you balanced your check book, then we use num as the variable, if you input a number you must have a place to store that number.

Then there is chkbook: as a label, why? You will see, and the colon is very important for labels.

Input "check to subtract", with the variable T. If you don't like T you can always change it, then there are two if lines, if (T = -1) then goto fini 'to end. As the program goes along it reads the if line and if it is false it reads the next line, I chose -1 because nobody enters a negative number in their checkbook. The bank frowns on negative balances, it makes them very unhappy, but if you enter -1 in the program it doesn't subtract -1 but sends you to the label fini: this is how we keep control of our program. There are no line numbers to goto so we must use labels to keep control.

The next line is, if (T = -2) then goto how 'to add, the program has read the input line to subtract and the two if lines and is waiting for you to make a decision. If you

don't want to finish or add, then enter the number to subtract and the program will go on to num = num - T. Where it takes your check book balance and then subtracts your check which you put in T and puts it back in num so that num is always up to date.

Once that is done it drops down to goto chkbook, this is where the label chkbook: comes in. It is the top of the loop (there is more than one way to make a loop). Goto chkbook is the bottom and loops until you enter -1 or -2., then the next line is the label. How? Doesn't make sense does it? You can use any label you want as long as you understand it and it works.

Print for a blank line, beep so you will look up to see what all the noise is about, then the total so far.

Then input "deposit" with the variable D, then if (D = -2) goto dun, which will get you out of deposits. If you have more deposits then keep entering them until you are finished with deposits, then enter -2. Then num = num + D, so that all deposits will be added to num. It's very important that num remain num through the whole program. You can't think "I'm tired of using num, lets try a different variable." Your program won't work.

You might say that everybody knows that, but I'm sorry, not everybody knows that. Some of the younger users will try that and run into trouble and not know what the trouble is, it's up to us to tell them the right way of doing it.

There is goto add, which is the bottom of the add loop, then the label dun:, and beep to make us look up to see why it is beeping, then print for a blank line, and the total, which is always nice to know, then the label fini, and end.

STATMNT.BAS is a statement program that goes with the chkbook program. It has been tested and works well. One thing about a program like this, each goto puts one on the stack, and if you get enough on the stack you run out of memory, but I tested the stack and

it is a bit large, but I don't think you will ever have that problem.

This program is a little on the long side so I won't try to explain all that I did. But I will tell you how the program is made to work.

First, type everything in as listed in the magazine, leave nothing out. When you click on run and you get an error message don't let it bother you, everybody has that problem, Qbasic will show you where the typing error is, then all you do is compare the program with the listing in the magazine and fix it. Click on run again and go to the next error. You may have no typing errors or typing many errors, this is normal, all you do is fix them and don't give up. If you give up you will never learn. But if you don't give up, what you learn will become more than what you don't know. Soon it will become easier.

When I sat down to do this program one thing led to another and I don't think I left much room for improvement, maybe you can find something I missed and make it a better program. You don't know until you try.

The program is in Qbasic but you should have no trouble converting it to GWbasic or basicA.

When you have typed the listing in and there are no more errors don't forget to save it, I call it STATMNT.BAS, but you can name it whatever makes sense to you, then click on run, you should get the menu on a grey screen with dark blue letters, you can look at it and see what to do, but just in case this is your first time at copying from a magazine (you can find some very good programs in this magazine).

The first thing after you click on run, the menu will come up, if your going to do your check book then type 1 <enter> then the menu will disappear and a line will appear at the top of your screen asking you to "enter the last time you balanced your check book" just

type in the last time you balanced your check book and press <enter>, then another question will ask "check to subtract" just type your first check and press <enter>. The program will subtract it from the last time you balanced you check book and ask you again for the next "check to subtract" until there is no more.

Then type -2, the program won't subtract -2, -2 is code for the computer and says I'm finished with subtracting you can total now and put me in deposit mode. You can make the code whatever you want, it depends on how you write the program.

Now, you are in deposit mode and all you do is type in your deposits and press <enter>. The program will add your deposit to num, then type -2 so that the program will print the total and take you back to subtract.

You can subtract some more, but if you don't have any more to subtract type -1 to get back to the menu. Then type 3 and your out, the same with subtracting, if you are finished with subtracting you must type -2 to get the total but it will put you in deposit mode, all you do is type -1 to get back to the menu and out.

When you want to do your statement, from the menu you type 2 <enter> and the computer will ask for your first outstanding check, the program will not do your check book for you, you are still going to have to do all that work.

After you sit down with your bank statement and check book and put everything in order. You write all your outstanding checks on the back of the bank statement. This is where the problem comes in, people make mistakes. They add up their trial statement and check with the bank statement and the numbers don't match. So they do it again and they get some other number that doesn't match.

You can sit down with this program and it will make balancing your check book a lot easier -Robert Knowles

ASCII, INTER-COMPUTER COMPATIBILITY

by Dale Hill

"Dad, now all I have to do is go up and put this into Wordperfect, and it will be ready for the newspaper," said our son who had just finished two articles on one of our "orphaned" computers.

"Don't do that," I said. "Just move the file over to MS-DOS and put it on a 3 1/2 diskette, then go into Wordperfect and import it as an ASCII file." That evening, Nathan came home saying, "My teacher said, 'I can't believe you can do that with a TRS-80!', [or Tandy 1000] when I pulled the files into Wordperfect."

I am sure we have all heard of ASCII files, but it certainly won't hurt to go over what they are and how we can take advantage of them for the longevity of our expensive computers. Data is data, no matter computer we are using. Certainly word processor files should share some compatibility, since the end product is always about the same thing. Modern word processors produce files that are "WHAT YOU SEE IS WHAT YOU GET" (WYSIWYG). Thus, on-screen formatting will allow you to see the article as you write it, just like it would print out. This is great for most of us, except when we want to reuse that same data on another computer. Fortunately, most word processors have utilities or filters that allow other formatted documents to be imported into their program. But, all word processors can import one type of file, the ASCII file.

ASCII files are documents that have no on-screen formatting. Wordstar CPM has a Non-document file that it can make and import ASCII files. For the TRS-80, ALLWRITE is considered ASCII. An Allwrite file can instantly be imported into any word processor, though the on-screen formatting commands will need to be deleted.

This summer, we had a 386 at our house, and we had a girl staying

with us who liked to write poems. her poetry on put WINDOWS word processor and then wanted them printed out. Unfortunately, I did not bring home a printer cable for that machine. What I did was simply move those files over to TRS-DOS, Model 4, format and then opened them as an Allwrite file. What I had was a bunch of garbage with her poetry embedded in the middle of it. I simply deleted all the extraneous garbage, saved it as an Allwrite ASCII file, and reformatted it as a DOTWRITER file and printed it as a fancy-fonted frameable document. It worked beautifully.

For years, I have been editing stories for an elderly writer who simply cannot type anymore. It has been fun, since we have had lots of her stuff published in various publications. Last year she wanted me to put all of her stories together as a book. I wanted to do it on a Macintosh, but retyping the two 5 1/4 diskettes full of stories was a formidable task, in fact, a job that I wasn't going to do. Using David Miller's MS-DOS utilities, I transferred all of the Model 4 Allwrite files to a 800K, 3.5 diskette and then imported each ASCII file into Microsoft Works for the Mac. The process only took me an hour or so, and the booklet turned out beautifully. So what do we need to be versatile as we work with different computer formats.

First of all, recognize that has now become the MS-DOS standard format for computers world-wide. Every Macintosh now comes loaded produced PC-EXCHANGE, unless one is bought heavily discounted through the company. Even then, PC-EXCHANGE can be picked up individually for about \$40. With PC-EXCHANGE, Apple File Exchange, David Miller's MS-DOS Utilities and even HYPERCROSS, data can be shared from many different computers. Even Commodore has utilities to exchange data from the

Commodore mode to the Commodore 128 CPM mode, which is simply EPSON CPM, which then can be moved over to the TRS-80 or any of the above combining the various utilities.

With the Mac, know this from the very beginning. PC-EXHANGE APPLE FILE EXCHANGE WILL NOT WORK for MS-DOS unless you have the SUPER-DRIVE and System 7. The Super-Drive first came out with the Mac Classic II and is shared by all later Macs. If you want to crash your Mac system, try using PC-Exchange on a computer that does not share the above attributes. The APPLE lady from whom I ordered PC-Exchange happily informed me that, "Yes, the PC-EXCHANGE will work on a Mac Plus with system 6.07 or above." Don't do it, please.

When using MS-DOS utilities by David Goben, the Model 4 folks need an 800K disk and a drive as the second, internal drive. The confusing thing about David Miller's product is that its default a: drive is actually the second or :1 drive for the TRS-80. Once by that oddity, it works perfectly. Do not format a 2 meg or 1.4 meg diskette when transferring files from Model 4 to the Mac. The Mac will only read the 800K disk with PC-EXCHANGE, and will try to automatically format the other two storage versions and the precious information on them. Hypercross for the TRS-80 is useless as a transferring agent from TRS-80 to the Mac.

So what does all of this information mean. It simply means that when you move to another, larger or more powerful computer, save your old computer and put it in the bedroom with the kids. Trust me, they will have reports and research papers to generate. Let them generate those on the other computers, out of your hair, leaving the newest computer as your computer, only to be used at your discretion, and if you believe that, I have a picture of an alien ship that landed in my back yard. But, it is a

help to have our kids generate their reports elsewhere, when I have a bunch of work that I must get done on our main computer.

Now all of this may seem like jumbo to the mumbo computerist, but it is simply not. In order to get good at your computer or your word processor, and I mean really good, you need to understand how to function computer literate. Certainly ASCII is something that a computer user needs to know about. The more you know, the less dependent you are on one specific computer. Yes, your hard drive will go down, and so will your power supply, sometime. Having a couple of older computers around and understanding the function of the ASCII file, the horrors of crashed programs, systems and machines seem a bit less worrisome.

Even with an understanding of ASCII, the computer user still needs to know and understand his word processor of choice, and the only way to do that is by studying the manual and using it. I give thanks every day for computers. Truly, truly, I have a fine-motor skill disability and also a inherent disability to typing skills - I cannot type an error free page, and my written communication using cursive or printing is atrocious. Because of programs that I use at work, I had to buy a Mac LC II this summer, since a physically permanent handicapping disability, will longer allow me to lug computers home from school. Thus, I pray a prayer of thanksgiving every time I turn on one of my computers and start moving ASCII files around on various computer setups.

-Dale W. Hill



OPEN FORUM LETTERS TO THE EDITOR

LTR: Dear Editor:

I've owned 26 microcomputers, I've written over 500 magazine articles and five books specifically about microcomputer hardware and software since 1978 - and I've come to the following conclusions, which I call "Blechman's Ten Laws of Computing":

- (1) "When it's manufactured, it's already 'obsolete' but still far more powerful than you need."
- (2) "When you try to use it, it's incompatible with everything you have that used to work."
- (3) "When you try to return it, they're out of business or suddenly don't understand English."
- (4) "No matter how big your hard drive, it will be filled within 30 days or less - mostly with things you'll never use."
- (5) "Nothing works the first time, and never works when you try to show it off."
- (6) "Everything you use is attacking your body with electromagnetic radiation of various sorts."
- (7) "Any software upgrade costing less than \$20 is an admission of guilt."
- (8) "Version 1 of any software is full of 'bugs.' Version 2 fixes all the bugs and is great. Version 3 adds all the things users ask for, but hides all the great stuff in Version 2."
- (9) "Any software costing over \$100, or with documentation of over 100 pages, is too complicated."
- (10) "You probably were better off with 3x5 cards and a typewriter in the first place!"

There are ways to "beat" these "laws" - but that could be the subject of a l-o-n-g article (and a 1-hour talk I've given to computer local clubs). I only offer these "laws" here to counter the enormous computer hype that is avalanching unsuspecting buyers who might well be satisfied with plain-vanilla used PCs, XTs or 286 machines with monochrome mon-

itors. In a recent check of local computer stores, I found none that sold less than 486 or Pentium machines with Super-VGA color monitors. This is gigantic overkill for many prospective users. Do you agree, or are you one who must have the latest and greatest - whether you need it or not, and regardless of how much it will complicate your life?

-Fred Blechman, West Hills, CA

Q: Please send a list of current sources for Professional Write. -J. P. S. Chico, CA

Professional Write is published by the Software Publishing Corporation who also publishes Professional File. Both packages are available thru CNPC, or from many computer stores. However if you are a Computer News Purchasing Club Member you can save even more on the on the price of the package. Professional Write is a word processing package by the same software people who sell Professional File. See our review in Volume 1 No. 2 July/August of CNPC, and the editorial in Vol. 2 No. 2.

Both Professional File and Professional Write, are the latest versions of the programs that started as pfsFile and pfsWrite. pfsWrite was reviewed by David P. Miller in Vol. 1 No. 3 Sept/Oct. 1993.

Q: I have just acquired a Tandy 1000SL and I am not sure just how much memory it has in it. I have also been told there are several versions of MS-DOS available. Which is the best one to use with this computer.

-S. L. South Bend, IN

A: When you first turn your computer on the amount of memory available should come up on the screen. Because the SL boots from the MS-DOS version 3.3 that is stored in ROM (Read Only Memory) it will tell you how much memory is available while checking out its system. The number will not stay on the screen for long. The original amount of Memory installed should be 384K of RAM. (Random Access Memory). See Chart Below.

According to Tandy, you will have the best luck using the version of DOS that came packed with the computer. Each computer has its own set of ROM chips that were designed for the MS-DOS version that was available at the time the board was designed. Refer to CNPC Vol. 2 No. 4 for the listing of which MS-DOS version was packaged with your 1000.

Q: I have a Tandy 1000 EX which I purchased at a sale. It works fine, except that I did not get a copy of the DeskMate program that originally came with it. What is the Catalog Number of the DeskMate program for the EX.-B. G. Kansas City, KS

A: Below is a table with the catalog number, the number and size of the disks in a set, and the version name of the DeskMate for Tandy 1000 computers. 1000SL, SL/2, TL, TL/2, RL, RL-HD all have DeskMate stored in ROM.

Computer	Catalog#	Disks
DeskMate II		
1000SX	25-1164	3-5.25"
1000	25-1164	3-5.25"
PERSONAL	DeskMate	
1000EX	25-1165	2-5.25"
1000	25-1165	2-5.25"
PERSONAL	DeskMate	2
1000HX	25-1177	1-3.5"
1000TX	25-1177	1-3.5"
1000	25-1177	1-3.5"
DeskMate 3*		
1000RLX	25-1351	5-3.5" or
1000RLX-HD	25-1351	10-5.25"

*DeskMate 3 was produced as a stand-alone for any PC Compatible or Tandy (286 or 386) system. DeskMate 3 was last offered in Tandy's 1993 Catalog.

Original Memory Installed in Tandy 1000 Computers

128k	256k	384k	512k	640k	1 Meg
1000	EX	SX	RL	TL	RLX-HD
1000 A	HX	SL	RL-HD	TL/2	RSX
1000 HD		SL/2	RLX	TX	RSX-HD

CHKBOOK.BAS PROGRAM LISTING NUMBER ONE by Robert Knowles

SCREEN 9 COLOR 4, 7 INPUT "ENTER THE LAST TIME YOU BALANCED YOUR CHECK BOOK."; num CHKBOOK: INPUT "check to subtract."; T IF (T = -1) THEN GOTO FINI 'to end IF (T = -2) THEN GOTO HOW: 'to add num = num - T **GOTO CHKBOOK** HOW: PRINT BEEP PRINT "THE TOTAL IS"; num ADD: INPUT "DEPOSIT"; D IF (D = -2) THEN GOTO DUN 'enter -2 to end add num = num + D**GOTO ADD** DUN: BEEP PRINT PRINT "THE TOTAL IS"; num

GOTO CHKBOOK 'return to subtract

FINI: END

STATEMNT.BAS PROGRAM LISTING NUMBER TWO by Robert Knowles

'THIS IS A PROGRAM TO BALANCE YOUR CHECK BOOK 'AND A PROGRAM TO DO YOUR STATEMENT 'THEY WON'T DO THEM FOR YOU, YOU MUST PUT THEM 'IN BUT THEY WILL MAKE LIFE EASIER 'WRITTEN BY ROBERT KNOWLES SEPTEMBER 1994 SCREEN 9 COLOR 1, 7 MENU: CLS **LOCATE 10, 30 PRINT STRING\$(20, 42)** LOCATE 11, 30 PRINT "*CHECKBOOK (1)*" **LOCATE 12, 30** PRINT "*STATEMENT (2)*" **LOCATE 13, 30** PRINT "*THE END **LOCATE 14, 30** PRINT STRING\$(20, 42) INPUT "WHICH PROGRAM DO YOU WANT "; X IF X = 1 GOTO CHKBOOK IF X = 2 GOTO STATEMENT IF X = 3 GOTO DUN CHKBOOK:

Cont'd on next page.

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INPUT "ENTER THE LAST TIME YOU BALANCED YOUR CHECK BOOK."; NUM CHECKBOOK: INPUT "check to subtract.": T IF (T = -1) THEN GOTO MENU 'to end IF (T = -2) THEN GOTO HOW: 'to add NUM = NUM - TGOTO CHECKBOOK HOW: CLS PRINT BEEP PRINT "THE TOTAL IS"; NUM ADD: INPUT "DEPOSIT": D IF (D = -1) GOTO MENU'enter -1 to return to menu to quit IF (D = -2) THEN GOTO OK'enter -2 to end add NUM = NUM + D**GOTO ADD** OK: BEEP PRINT "THE TOTAL IS ": NUM GOTO CHECKBOOK 'return to subtract STATEMENT: CLS INPUT "ENTER FIRST OUTSTANDING CHECK"; f STATEMNT: INPUT "ENTER NEXT OUTSTANDING CHECK"; N IF (N = -2) THEN GOTO CHBKBAL f = f + N**GOTO STATEMNT** CHBKBAL: INPUT "ENTER CHECK BOOK BALANCE"; BAL f = f + BALCLS LOCATE 9, 35 PRINT STRING\$(15, 42) **LOCATE 10, 35** PRINT "*"; TAB(37); f; TAB(49); "*" **LOCATE 10, 37** PRINT USING "\$\$##,##.##"; f **LOCATE 11, 35** PRINT STRING\$(15, 42) PRINT PRINT "THIS BALANCE SHOULD AGREE WITH YOUR STATEMENT" DUN: BEEP

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Programs

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	10029	sample and religions in reconstruction reconstruction	ADDRESS BOOK IN BASIC & 18 ROUTINES FOR FINANCIAL
		140 140	CALCULATIONS
	10031	MINDREADER (SW)	BOILERPLATE WORD PROCESSOR
	10043	ACCOUNTING SYSTEM (SW)	SMALL BUSINESS ACCOUNTING SYSTEM
	10044	MR. BILL (SW)	BILLING PROGRAM
	10045	MR. BILL (SW)	BILLING PROGRAM
	10046	STOCK CHARTING (SW)	STOCK PORTFOLIO MANAGEMENT
	10047	EXPRESS GRAPH (SW)	GRAPHS AND PIE CHARTS
	10048	CHARTS UNLIMITED (SW)	GRAPHICS AND TEXT CHARTS
	10050	MAIL LIST (PD)	MAIL LIST PROGRAM
	10125	THE SIMPLE BOOKKEEPER (SW)	VERY EASY TO USE SINGLE ENRTY BOOKKEEPING PROGRAM. REQ:
			DOS 2.1+, 384K RAM, CGA-EGA-VGA-SVGA, 286+
	10139	ENVELOPE (PD)	UNCOMPLICATED UTILITY FOR TYPING ENVELOPES
	10148	PC-MAIL (SW)	MAIL LABEL PROGRAM DISK #1 OF 2
	10149	PC-MAIL (SW)	MAIL LABEL PROGRAM DISK #2 OF 2
	10167	MAILLAB (PD)	A BASIC MAIL LABEL PROGRAM
	10178	THE BOTTOM LINE (SW)	USER-FRIENDLY, MENU-DRIVEN,
			PACKAGE FOR STOCK & BOND INVESTORS
			5 1/4" HD OR 3 1/2 DD DISK ONLY
			REQUIRES CGA OR BETTER
	10179	ENLIST (SW)	GENERIC CUSTOMER WAITING LIST PROGRAM. REQ: WINDOWS 3.1
			5 1/4" HD OR 3 1/2 DD ONLY
	10187	AS EASY AS (SW)	VERSATILE SPREADSHEET PROGRAM
	10203	LEGAL GUIDE & FORMS (SW)	HANDY LEGAL GUIDE & FORMS GENERATOR
			DISK #1 OF 2
			HOME OR BUSINESS
	10204	LEGAL GUIDE & FORMS (SW)	DISK #2 OF 2
	10231	THE BOTTOM LINE (SW)	5 FINANCIAL CALCULATORS, AVERAGING.
			WINDOWS. HD ONLY DISK #1 OF 2
	10232	THE BOTTOM LINE (SW)	DISK #2 OF 2
	10263	WINVELOPE (SW)	ENVELOPE ADDRESSING PROGRAM FOR WINDOWS. DISK #1 OF 3
	10264	WINVELOPE (SW)	DISK #2 OF 3
	10265	WINVELOPE (SW)	DISK #3 OF 3
	10270	DOCUMENTSNEXUS (SW)	PROJECTS/DOCUMENTS DEVELOPMENT RECORDS. REQ: 512%, DOS 3.1+, HD
	10298	ZPAY PAYROLL SYSTEM (SW)	A LOADED POWERFUL PAYROLL SYSTEM. DISK #1 OF 5
	10299	ZPAY PAYROLL SYSTEM (SW)	DISK #2 OF 5
	10300	ZPAY PAYROLL SYSTEM (SW)	DISK #3 OF 5
	10301	ZPAY PAYROLL SYSTEM (SW)	DISK #4 OF 5
	10302	ZPAY PAYROLL SYSTEM (SW)	DISK #5 OF 5
	10322	PC-BOOKS (SW)	SMALL BUSINESS GENERAL LEDGER, BOOKKERPING PROGRAM
	10323	100 BUSINESS LETTERS (SW)	100 BUSINESS FORM LETTERS ALREADY CREATED
	10324	FORM MASTER (SW)	CREATE YOUR OWN BUSINESS FORMS
	10325	DOCTOR DATA LABEL (SW)	EASY TO USE MAILING LIST PROGRAM & LABEL MAKER. DISK \$1 OF 2
	10326	DOCTOR DATA LABEL (SW)	DISK #2 OF 2
	10352	EXPRESS CHECK (SW)	CHECKBOOK RECORD & WRITING UTILITY. DISK #1 OF 2
	10353	EXPRESS CHECK (SW)	CHECKBOOK RECORD & WRITING UTILITY. DISK #2 OF 2
CLIP ART	10119	SOULE'S CLIPART VOL 4 (SW)	CLIP ART .PCX VOLUME 4
	10213	SOULE'S CLIPART VOL 10 (SW)	CLIP ART .PCX VOLUME 10

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
CLIP ART	10214	SOULE'S CLIPART VOL 1 (SW)	CLIP ART .PCX VOLUME 1
	10215	SOULE'S CLIPART VOL 2 (SW)	CLIP ART .PCX VOLUME 2
	10220	SOULE'S CLIP ART VOL 5 (SW)	CLIP ART .PCX VOLUME 5
	10221	SOULE'S CLIPART VOL 3 (SW)	CLIP ART .PCX VOLUME 3
	10222	SOULE'S CLIP ART VOL 7 (SW)	CLIP ART .PCX VOLUME 7
	10223	SOULE'S CLIP ART VOL 6 (SW)	CLIP ART .PCK VOLUME 6
	10224	SOULE'S CLIP ART VOL 8 (SW)	CLIP ART .PCX VOLUME 8
	10225	SOULE'S CLIP ART VOL 9 (SW)	CLIP ART .PCX VOLUME 9
	10226	SOULE'S CLIP ART VOL 11 (SW)	CLIP ART .PCX VOLUME 11
	10227	SOULE'S CLIP ART VOL 12 (SW)	CLIP ART .PCX VOLUME 12
	10228	SOULE'S CLIP ART VOL 13 (SW)	CLIP ART .PCX VOLUME 13
	10229	SOULE'S CLIP ART VOL 14 (SW)	CLIP ART .PCX VOLUME 14
	10230	SOULE'S CLIP ART VOL 15 (SW)	CLIP ART .PCX VOLUME 15
	10234	SOULE'S CLIP ART VOL 16 (SW)	CLIP ART .PCX VOLUME 16
	10235	SOULE'S CLIP ART VOL 17 (SW)	SOULE'S CLIP ART .PCX VOLUME 17
	10236	SOULE'S CLIP ART VOL 18 (SW)	SOULE'S CLIP ART .PCX VOLUME 18
	10237	SOULE'S CLIP ART VOL 19 (SW)	SOULE'S CLIP ART .PCX VOLUME 19
	10238	SOULE'S CLIP ART VOL 20 (SW)	SOULE'S CLIP ART .PCX VOLUME 20
	10239	SOULE'S CLIP ART VOL 21 (SW)	SOULE'S CLIP ART .PCX VOLUME 21
	10240	GRIN GRAPHICS DISK #1 (SW)	GRIN GRAPHICS CLIP ART .PCX DISK #1
	10241	GRIN GRAPHICS DISK #2 (SW)	GRIN GRAPHICS CLIP ART .PCX DISK #2
	10242	GRIN GRAPHICS DISK #3 (SW)	GRIN GRAPHICS CLIP ART .PCX DISK #3
	10243	GRIN GRAPHICS DISK #4 (SW)	GRIN GRAPHICS CLIP ART .PCX DISK #4
	10244	CLIP ART DISK #1 (PD)	CLIP ART .PCX PUBLIC DOMAIN DISK #1
	10245	CLIP ART DISK #2 (PD)	CLIP ART .PCX PUBLIC DOMAIN DISK #2
	10248	FRAMES & BORDERS DISK #1 (SW)	
	10250	FRAMES & BORDERS DISK #2 (SW)	
	10250	FRAMES & BORDERS DISK #3 (SW) FRAMES & BORDERS DISK #4 (SW)	
	10252	SOULE'S CLIP ART (SW)	SOULE'S CLIP ART .PCX
	10253	SOULE'S CLIP ART (SW)	SOULE'S CLIP ART .PCX
	10254	BEST SELLING CLIP ART (SW)	BEST SELLING CLIP ART .PCX
	10255	BEST SELLING CLIP ART (SW)	BEST SELLING CLIP ART .PCX
	10257	HORNBACK ARTWORK (SW)	HORNBACK ARTWORK CLIP ART .PCX
	10258	HORNBACK ARTWORK (SW)	HORNBACK ARTWORK CLIP ART .PCX
COMMUNICATION	10075	MTE (PD)	MENU DRIVEN TERMINAL PROGRAM
	10172	DOSMODEM (PD)	SIMPLE DOS MODEM COMMUNICATION UTILITY
	10341	TELIX (SW)	FULL-FEATURED COMMUNICATIONS PROGRAM FOR PC/MS-DOS. DISK #1 OF 2
	10342	TELIX (SW)	DISK #2 OF 2
COOKING	10109		MANAGE SHOPPING LISTS, CREATES MENUS,
			FOOD INVENTORY. REQ: WINDOWS 3.X; DISK #1 OF 3
			ORDER DISKS #10109,10110,10124
	10110	GROCERY MANAGER	DISK #2 OF 3
	10124	GROCERY MANAGER (SW)	DISK #3 OF 3
	10206	PERSONAL NUTRITIONIST (SW)	TRACK BAD HABITS, CREATE MENUS, RECIPIES,
			ANALIZE MEALS, CALCULATE EXERCISE.
	10211	KOMPUTER KITCHEN (SW)	SELECT, RESIZE, ADD & EDIT RECIPES, METRIC CONVERSION,
			SPANISH & GERMAN TRANSLATIONS. WINDOWS . DISK #1 OF 2
	10212	KOMPUTER KITCHEN (SW)	DISK #2 OF 2

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
COOKING	10327	EDNA'S COOK BOOK (SW)	RECORD, FILE, LIST & PRINT YOUR RECIPIES. DISK #1 OF 2
	10328	EDNA'S COOK BOOK (SW)	DISK #2 OF 2
DATA BASE	10004	PROFILE (SW)	DATA BASE MANAGER
	10005	PROFILE (SW)	DATA BASE MANAGER
	10038	DAYFLO TRACKER LITE (SW)	PERSONAL INFORMATION MANAGER. DISK #1 OF 2
	10039	DAYFLO TRACKER LITE (SW)	DISK #2 OF 2
	10061	CD-PROFILE (SW)	DATABASE MANAGER FOR CD's, RECORDS & TAPES; 5 1/4 HD
	10099	BASE BALL CARDS (PD)	DATA BASE OF BASE BALL CARDS
	10290	MOVIE (SW)	CATALOG, SORT, SEARCH & CREATE LABELS FOR 32,000+ MOVIES
	10380	PC-FILE (SW)	DATA BASE FILE MANAGER; HIGH DENSITY DISK ONLY
DESKTOP PUB.	10192	RUBICON (SW)	DESKTOP PUBLISHING PROGRAM
			DISK 1 OF 3
	10193	RUBICON (SW)	DISK 2 OF 3
	10194	RUBICON (SW)	DISK 3 OF 3
EDUCATIONAL	10001	TYPING TUTOR (SW)	SEVERAL LEVELS OF TYPING EXCERCISES
	10012	KID GAMES (PD)	5 GAMES TO TEACH
	10019	CHALKBOARD MATH 1.5 (SW)	MATH TUTOR FOR AGES 5 TO 12. WINDOWS
	10025	GOOGOL (SW)	MATE TEACHING GAME
	10037	ALBEBRAX (SW)	LEARN ALGEBRA
	10066	POLYGLOT (SW)	VOCABULARY BUILDING WORD GAME
	10123	LANGUAGE LEARNER (SW)	LEARN 4 LANGUAGES, GERMAN, FRENCH, ITALIAN OR SPANISH AT
			YOUR OWN PACE. DOS OR WINDOWS
	10284	PC-FASTTYPE (SW)	EXCELLENT TYPING TUTOR & TESTER. DISK #1 OF 2
	10285	PC-FASTTYPE (SW)	DISK #2 OF 2
	10296	DOS LEARNING SYSTEM (SW)	TUTORIAL ABOUT YOUR COMPUTER & THE OPERATING SYSTEM
	10307	THE I.Q. CHALLENGE (SW)	WORD PUZZLES TO TEST YOUR I.Q.
	10313	COMPUTER TUTOR (SW)	READ CODED TEXT FILES & LEARN HOW YOUR COMPUTER SYSTEM OPERATES
	10314	MATH CASTLE (SW)	SOLVE THE MATH PROBLEMS & SAVE THE CASTLE
	10354	PRECALCX (SW)	LEARN CALCULUS
	10355	PROFSTAT (SW)	LEARN STATISTICS
FONTS	10350	HP LASER JET II FONTS (SW)	FONTS FOR HP LASER JET II. WINDOWS OR DOS. DISK #1 OF 2
	10351	HP LASER JET II FONTS (SW)	DISK #2 OF 2
GAMES	10006	BACKGAMMOND PC-GAMMON (SW)	PLAY BACKGAMMOND ON A PC
	10007	DRACULA OF LONDON (SW)	VAMPIRES GAME
	10008	DIGITAL LEAGUE BASEBALL (SW)	LEAGUE BASEBALL
	10009	DUNGEONS AND DRAGONS (SW)	ROLE PLAYING GAME
	10010	CAVERNS OF ZOARRE (SW)	FANTASY GAME
	10011	GAME DISK (PD)	WORLD AND WHEEL OF MISFORTUNE
	10013	GAME DISK (PD)	CHECKERS, GLOBAL THERMONUCLEAR WAR, IBM ADVENTURE
	10014	VIDEO POKER PLUS (SW)	DRAW AND STUD POKER
	10015	ULTIMA 21 DELUXE (SW)	BLACKJACK GAME
	10016	CORNCOB 3D (SW)	AIR COMBAT GAME
	10017	CORNCOB 3D (SW)	AIR COMBAT GAME
	10018	CORNCOB 3D (SW)	AIR COMBAT GAME
	10020	GAME BUILDER LITE (SW)	GAME CREATION SOFTWARE
	10021	GAME BUILDER LITE (SW)	GAME CREATION SOFTWARE
	10022	GAME BUILDER LITE (SW)	GAME CREATION SOFTWARE
	10024	PANGO (SW)	ARCADE GAME
	10028	GAME DISK (PD)	22 GWBASIC GAMES: AARDVARK; ATLANTIS; BACKGAM; BIO; BLACK;
		reconstruction and artistations. Const GAR, Will	

WYOMING SOFTWARE PUBLIC DOMAIN AND SHAREWARE

Catalog May 1994

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
GAMES	10028		BLKFRDY; ELIZA; FIREFIRE; STARTREK; TRUCKER; YASTZEE;
	20020		FUUTBOL; HIQUE; JETPILOT; KENO; LOTT; PATTERN; SHOP;
			SYNONYMS; WUMPUS.
	10030	GAME DISK (PD)	16 GWBASIC GAMES: MARS-ESC; DART; MAP; SOUNDEFF; AGE-TEST;
		8 3 70	BOWLING; STORY; TELLTIME; WHEEL; BELL; SHUTTLE3D; SKETCH;
			CHESS; SPACEVAD; VOYAGE.
	10033	GAME DISK (PD)	8 DOS GAMES: ARCHERY; AV; BEAST; COREWAR; EM; FORTUNE; KAMAKAZE;
			PENTE; SKIING.
	10034	MIRAMAR (SW)	JET FLIGHT SIMULATOR
	10040	ZZT (SW)	ACTION ADVENTURE GAME; COMPLETE THE TOWN OF ZZT.
	10041	SUPER ZZT (SW)	ADVENTURE GAME SEQUAL TO ZZT
	10042	MASTER THE MARKET (PD)	STOCK MARKET GAME
	10053	CASTLE OF THE WINDS (SW)	HIGH DENSITY DISK ONLY. WINDOWS
	10055	ASSAULT OF THE ORCS (SW)	ACTION/ADVENTURE GAME
			HOOSIER CITY; ASSULT OF THE ORCS
	10057	RAPID RESPONSE (SW)	GRAPHICS WAR SIMULATION
	10058	ROBOMAZE II: THE LOBBY (SW)	GRAPHICS ACTION GAME
	10059	ROBOMAZE III: THE DOME (SW)	GRAPHICS ACTION ADVENTURE
	10060	SAND STORM (SW)	VGA ARCADE GAME
	10077	NYET (PD)	VERSION OF TETRIS
	10098	GAME DISK (PD)	2 GAMES: ENCOUNTER & UNO
	10112	DOOMKILL	SAVED GAME MODIFIER FOR DOOM W/AMMO, ARMOR, INVISO, LIGHT,
			ALL KEYS (NO SKULLS), ALL WEAPONS EXCEPT #6 & 7, & COMPUTER.
	10113	DMCHEAT (PD)	DOOM: THE CHEAT! EDIT YOUR SAVEGAMES.
	10114	DMCH2 (PD)	DOOM: THE CHEAT 2! EDIT YOUR SAVEGAMES FOR EASY WIN.
	10115	DOOMEDIT	DOOM EDITOR V.2, WILL GIVE YOU A VARIETY OF NEAT STUFF.
	10116	DOOMED (SW)	MODIFY SAVEGAMES FOR THOSE ADDED GOODIES WHEN PLAYING DOOM.
	10117	DOOM MAPS (PD)	DOOM MAPS IN .GIF OR .PCX FORMAT
	10121	DOOM (SW)	THIS IS "THE" ACTION GAME. REQ: 386 OR LATER, 4Mb RAM,
			5Mb FREE SPACE ON HD. 3.5" HD DISKS ONLY. DISK #1 OF 2
	10122	DOOM (SW)	DISK #2 OF 2; 3.5" HD ONLY
	10141	KONG (PD)	GAME OF KONG
	10142	CRIBBAGE (PD)	GAME OF CRIBBAGE IN BASIC
	10145	GAME OF FOUR (PD)	BEAT THE COMPUTER WITH FOUR IN A ROW
	10150	FOUR ACTION GAMES (SW)	FOUR GAMES - BLOCKS
			RAIDERS, RESCUE, RUNNER
	10151	ADVENTURE GAME TOOL KIT (SW)	CREATE YOUR OWN ADVENTURE GAME. REQ: 348K
			DISK #1 OF 2
	10152	ADVENTURE GAME TOOL KIT (SW)	DISK #2 OF 2
	10159	THREE ACTION GAMES (SW)	THREE GAMES, ARCADE, TRIVIA, WORDWHIZ
	10175	POWERCHESS (SW)	GOOD CHESS GAME FOR YOUR PC
	10177	QUATRIS PRO (SW)	TETRIS WITH A TWIST. REQ: EGA/VGA
	10207	COMMANDER KEEN (SW)	ARCADE ADVENTURE GAME, GOOD GRAPHICS, SOUND.
	10216	WOLFENSTEIN 3D (SW)	BATTLE THE NAZI'S TO ESCAPE FROM THE CASTLE. DISK #1 OF 2
	10217	WOLFENSTEIN 3D (SW)	DISK #2 OF 2
	10218	WMAP WOLFGOD.DOC (PD)	GENERATE MAPS FOR WOLFENSTEIN 3D v 1.0 OR 1.1 & WOLFGOD.DOC
3	Ng/gatatan		GET GOD MODE PLUS OTHER GOODIES
	10233	JILL OF THE JUNGLE (SW)	256-COLOR VGA ARCAD-ADVENTURE GAME. HD ONLY
	10256	DOOM MOVIES DEMO (PD)	RUN MOVIES FOR LEVELS 1-9 IN "KNEE-DEEP IN THE DEAD".

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
GAMES	10256		REQ: DOOM v 1.2 SHAREWARE OR COMMERCIAL. 5 1/4 HD;3 1/2 DD
	10277	DOUBLE BLOCKS (SW)	DOUBLE BLOCKS GAME
	10279	SAVE THE PLANET (SW)	SAVE THE PLANET FROM OZONE DEPLETION & GREENHOUSE WARMING
	10280	LOTTO NUMBER GENERATOR (SW)	GENERATE LOTTO NUMBERS FOR A BETTER CHANCE TO WIN
	10281	BATTLESHIP GAME (SW)	SINK YOUR OPPONET'S BATTLESHIP
	10282	GO-MOKU (SW)	GET FIVE STONES IN A ROW AND WIN
	10286	SUPER TRIVIA PAK (SW)	5 TRIVIA GAMES, INCLUDES STAR TREK & NEXT GENERATION
		PC-JIGSAW (SW)	SOLVE A JIGSAW PUZZLE ON YOUR PC
		AQUARIUM (SW)	TURN YOUR COMPUTER SCREEN INTO AN AQUARIUM
		VEGAS DRAW POKER (SW)	DRAW POKER UP TO 8 PLAYERS.
		,	REQUIRES DOS 2.0+ PC/XT/AT
	10306	MORAFF'S BLAST (SW)	INTENSE ACTION GAME
	10310	ASTROLOGICAL FORTUNE (SW)	GET YOUR ASTROLOGICAL, NUMEROLOGICAL
			& CHINESE FORTUNES
			BY PROCON
	10311	FACTS/BAS & STATES/BAS (PD)	FACTS & PICTURES OF THE 50 STATES. REQ: GWBASIC
	10312	GEOGRAPHY/BAS (PD)	PLAY A GAME & LEARN GEOGRAPHY. REQ: GWBASIC
	10316	ELIZA (PD)	DISCUSS & SOLVE YOUR PROBLEMS BY TALKING TO ELIZA
	10318	6 - ARCADE GAMES (PD)	SIX ARCADE ACTION GAMES
	10319	PLAY N LEARN (PD)	GAMES FOR THE VERY YOUNG, PLAY & LEARN
	10338	MUZHEC (SW)	PLAY SONGS ON YOUR PC SPEAKER
	10339	PCBEAT (PD)	CHEAP DRUM MACHINE SIMULATOR FOR 6-12 MHz
	10340	LOTTO (SW)	PLAY LOTTO AND TRY TO WIN
	10345	BIBLE QUIZ (SW)	LEARN THE BIBLE WHILE PLAYING A GAME
GRAPHICS	10070	DREAM HOUSE (PD)	FLOOR PLAN DRAWING PROGRAM
	10072	GRBIRD (PD)	BIRDS TO USE W/PRINTSHOP
	10076	SIMGRAFB (SW)	GRAPHIC ROUTINES FOR BASIC, C, & FORTRAN LANGUAGES
	10103	IMAGE::RUNNER (tm) (SW)	DEVELOPERS' PCX DISPLAY UTILITY FOR DOS APPLICATIONS.
			REQ: 512K, VGA, HD, DOS 3.1, OR WINDOWS 3.X
	10104	TRADE::SHOW (tm) (SW)	SLIDESHOW APPLICATION PROGRAM FOR PRODUCTS OR SERVICE DEMOS OR
			PRESENTATIONS W/PCX FILES, SELF-RUNNING OR OPERATOR CONTROLLED.
			REQ: 512K, VGA, HD, DOS 3.1 OR WINDOWS 3.X
	10105	FACADE (tm) (SW)	DEVELOPERS' PCX SPLASHSCREEN DISPLAY FOR DOS APPLICATIONS.
			REQ: 512K, VGA, HD, DOS 3.1 OR WINDOWS 3.X
	10129	SVGA (SW)	GRAPHIC VIEWER FOR GIF, PCX, WINDOWS BMP, & TARGA FORMATS
	10130	GRAPHIC DISPLAY SYS. (SW)	GIF87a, GIF89a, BBM, LBM, PCX, RIX & MAC GRAPHICS VIEWER,
	10121	CONDUCTOR WORKSHOP (CV)	SLIDESHOW, PROCESSING, ARRAYS, MOUSE SUPPORT
	10131	GRAPHIC WORKSHOP (SW)	PROGRAM FOR WORKING W/COMPUTER BITMAPPED GRAPHIC FILES DISK 1 OF 3
	10132	GRAPHIC WORKSHOP (SW)	DISK 2 OF 3
		GRAPHIC WORKSHOP (SW)	DISK 3 OF 3
		CSHOW (SW)	MENU DRIVEN GRAPHICS VIEWER
		GRAPHIC WORKSHOP (SW)	GOOD GRAPHICS EDITOR FOR WINDOWS 3.1
	ಯಾಗಾಗ್ ಪ್ <i>ಪ್</i> ಟ		HIGH DENSITY DISK ONLY
	10136	SHOWGIF (SW)	WINDOWS IMAGE VIEWER & CATALOG MANAGER
		WINDOWS GRAPHIC VIEW (SW)	DISPLAY, CONVERT, & MANIPULATE GIF & BMP FORMATS, SLIDESHOW.
		(/	WINDOWS
	10153	GRAPHIC ART	GOOD 16 COLOR GRAPHIC PICTURES FOR TANDY 1,000 OR PCjr
		RLE FILE GENERATOR	CAPTURES SCREEN TO GENERATE A FILE, THEN DISPLAYS IT IN .RLE
			energe version erresolutive are reconstructurated accompanies follows: Scale actions at the still statement

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
GRAPHICS	10164	PAINTER'S APPRENTICE (SW)	BITMAP EDITOR FOR MACPAINT, PC, PAINTBRUSH, DR. HALO, ETC.
	12/10/20/00/04	Marriages where the property of the state of	REQ: EGA, VGA & MOUSE DRIVER COMPATIBLE W/MICROSOFT'S
	10166	THATS ALL FOLKS & VGAGIF (PD)	
	10330	OPTIKS (SW)	READ, WRITE OR CONVERT MANY GRAPHIC FILES
	10333	ATHENA VIDEO BIOS (SW)	GRAPHIC SUPPORT FOR HERCULES GRAPHICS STANDARD
	10337	DRAFT CHOICE (SW)	GRAPHIC DRAWING PROGRAM
	10343	PICTURE LABEL (SW)	PRINTS GRAPHICS ON LEFT HAND SIDE OF ADDRESS LABELS WITH TEXT
			USES GRAPHIC LIBRARIES OF PRINTMASTER, PRINTSHOP OR
			NEW PRINTSHOP. REQ: CGA, HERCULES OR BETTER
	10346	PRINT MASTER GRAPHICS (SW)	GRAPHIC PICTURES TO USE WITH PRINT MASTER. DISK #1 OF 2
	10347	PRINT MASTER GRAPHICS (SW)	GRAPHIC PICTURES TO USE WITH PRINT MASTER. DISK #2 OF 2
	10348	PRINT SHOP GRAPHICS (SW)	GRAPHIC PICTURES TO USE WITH PRINT SHOP. DISK #1 OF 2
	10349	PRINT SHOP GRAPHICS (SW)	GRAPHIC PICTURES TO USE WITH PRINT SHOP. DISK \$2 OF 2
MUSIC	10035	MELODY MAKER (SW)	WRITE AND COMPOSE MELODIES
	10049	MUSCIAN (SW)	MUSICAL NOTATION PROGRAM
	10052	PIANO MAN (SW)	PLAY KEYBOARD LIKE PIANO
	10097	MUSIC DISK (PD)	2 PROGRAMS: BEATLES.COM & MRORGAN.COM
PERSONAL	10051	HOME BUDGET MANAGER (SW)	HOME BUDGET RECORD KEEPING
	10054	HOME INSURANCE (SW)	HOME INVENTORY AND INSURANCE
	10071	RESUME (PD)	GWBASIC RESUME PROGRAM
	10107	MONEY & BANKS (SW)	SIMPLE, EASY TO USE PERSONAL BANKING MANAGER.
			REQ: HD w/1.4MB FREE, 512K, DOS 3.1 & EMS IF AVAILABLE
	10111	HOME MANAGEMENT II (SW)	CREATE BUDGETS, ANALYZE SPENDING HABITS, BALANCE CHECKBOOKS,
			LOAN AMORTIZATIONS, STOCK TRANSACTIONS. GOOD TUTORIAL.
	10118	MONEY SMITH FOR WINDOWS (SW)	PERSONAL MONEY MANAGEMENT SYSTEM. BALANCE YOUR CHECKBOOK,
			HANDY CALCULATOR. REQ: 800Kb FREE ON HD, WINDOWS 3.X
			DISK #1 OF 2
	10119	MONEY SMITH FOR WINDOWS (SW)	DISK #2 OF 2
	10127	FPLAN (SW)	PERSONAL FINANCIAL PLANNER: COMPREHENSIVE FINANCIAL ANALYSIS
			REQ: HD W/2MB+ FREE, 256K RAM, DOS 2.1+, COLOR MONITOR (MONO OK)
			DISK 1 OF 2
	10128	FPLAN (SW)	DISK 2 OF 2
	10156	RETIRE ANALYSIS (SW)	SERIES OF 3 PROGS DESIGNED TO ASSIST IN FINANCIAL GOALS
	10186	FAMILY TIES (SW)	GENEOLOGY PROGRAM
	10189	HOME MONEY MANAGER IIa (SW)	HOME BUDGET & CHECKBOOK SOFTWARE
	10191	CASHFLOW (SW)	HOME CASHFLOW PROGRAM
	10201	EXCHEQUER (SW)	CHECK WRITING & CHECKBOOK MANAGEMENT PROGRAM
	10205	MONEYMAKER VOL I (SW)	HOW TO MAKE MONEY W/YOUR PC PROGRAM HAS VOICE SYNTHESIS
	10266	AUDIONEXUS (SW)	MUSIC LIBRARY RECORDS. REQ: 512K RAM, DOS 3.1+, HD
	10267	VIDEONEXUS (SW)	VIDEO COLLECTION RECORD KEEPING PROGRAM. REQ: 512K, DOS 3.1+,HD
	10269	APPOINTMENTS SCHEDULER (SW)	PROFESSIONAL/PERSONAL APPOINTMENTS SCHEDULING SOLUTIONS.
			REQ: 512K RAM, DOS 3.1+, HD
	10271	PHOTONEXUS (SW)	PHOTOGRAPHY COLLECTION RECORDS. REQ: 1.3MB ON HD
		COINSNEXUS (SW)	NUMISMATIC COLLECTION RECORDS. REQ: 512K RAM, DOS 3.1+
		REGISTRYNEXUS (SW)	VALUABLES/POSSESIONS RECORDS. REQ: 512K RAM, DOS 3.1+
		SPROTSNEXUS (SW)	
	1020202020	ALMANAC (SW)	SPORTS CARDS COLLECTION RECORDS. REQ: 512K RAM, DOS 3.1+
		VACATION PLANNER (SW)	ELECTRONIC FARMERS ALMANAC.
		OVERANDINE WARRY SEE SCHOOL SEED OF SEED OF	VACATION OR BUSINESS TRIP PLANNER
	10273	RETIREMENT PLANNER (SW)	FINANCIAL PLANNER FOR RETIREMENT

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
PERSONAL	10304	NAMES & DATES (SW)	COMBINED ADDRESS BOOK, MAILING LIST, & DATE REMINDER.
			DISK #1 OF 2
	10305	NAMES & DATES (SW)	DISK #2 OF 2
	10320	FAST BUCKS (SW)	FAST BUCKS HOME FINANCIAL PROGRAM. DISK #1 OF 2
	10321	FAST BUCKS (SW)	DISK #2 OF 2
SCREENSAVER	10065	MOVIE TIME SCREEN SAVER (SW)	RUNS .GIF, .AVI FILES OR MOVIES; 5 1/4 HD
	10183	EXPLOSIV (SW)	THE NAME TELLS THE STORY. DOS OR WINDOWS
			DISK 1 OF 2
	10184	EXPLOSIV (SW)	DISK 2 OF 2
	10185	DAZZLE (SW)	NICE DOS SCREEN SAVER
SPECIALTY	10003	MODEL I EMULATOR (SW)	RUN RADIO SHACK MODEL ONE PROGRAMS
	10036	ZEPPELAN (SW)	NETWORK MANAGER
	10056	MVP PAINT (SW)	256-COLOR GRAPHICS WORKSHOP; REQ. VGA/SVGA & MOUSE
	10062	GSCRIPT (SW)	WORD FOR WINDOWS TEMPLATE FOR FEATURE SCREENPLAYS;5 1/4 HD
	10063	GTOOLBOX (SW)	MACROS & MACRO TOOLS FOR WORD FOR WINDOWS V 2.0;5 1/4 HD
	10064	INI PROFILER (SW)	REVIEW & EDIT CONTENTS OF ".INI" FILES. WINDOWS
	10188	ICONDRAW FOR WINDOWS (SW)	DRAW YOUR OWN ICONS FOR WINDOWS 3.0
	10190	BOWL - 101e (SW)	BOWLING LEAGUE SECRETARY SYSTEM
	10200	MILEAGE (SW)	MILEAGE BETWEEN MAJOR US CITIES
	10210	SCREEN PEACE (SW)	SCREENSAVER W/AQUARIUM, EYES, FADE, FIRE, FLASH, ETC.
			WINDOWS
	10259	DC CIRCUIT ANALYSIS (SW)	EDUCATIONAL TOOL FOR INTRO INTO DC CIRCUITS. REQ: 300K, EGA, VGA
			DISK #1 OF 3
	10260	DC CIRCUIT ANALYSIS (SW)	DISK #2 OF 3
	10261	DC CIRCUIT ANALYSIS (SW)	DISK #3 OF 3
	10262	CIRCUIT DESIGN (SW)	ELECTRONIC CIRCUIT DESIGNER
			REQUIRES 320K RAM
	10268	VISIBLE::SETUP (SW)	DEVELOPERS' INSTALLATION UTILITY FOR DOS APPLICATIONS.
			REQ: 512K RAM, DOS 3.1+ OR WINDOWS 3.X
	10297	WINDOWS ICONS (SW)	100+ ICONS FOR WINDOWS. REQ: WINDOWS & ICONDRAW
SPREADSHEET	10309	PROCUBE LITE (SW)	3 DIMENTIONAL SPREADSHEET PROGRAM
	10381	PC-CALC SPREADSHEET (SW)	SPREADSHEET PROGRAM. HIGH DENSITY DISK ONLY.
UTILITY	10002	COPYCAT (PD)	ONE PASS DISK COPYING
	10023	PC TUTOR (PD)	MS-DOS COMMANDS TUTOR
	10026	HARD DRIVE INFORMATION (PD)	HARD DRIVE INFORMATION
	10032	DOS UTILITIES (PD)	4 PROG: CDIR, FORM FEED, LHARC, SFX
	10067	DVICEMAP (SW)	DEVICE DRIVER MAP PROGRAM FOR MS-DOS W/BIBLOGRAPHY OF BOOKS
	10068	NMIEXIT (SW)	CURE FOR "LOCKED KEYBOARD" CONDITION
	10069	10 UTILITY PROGRAMS (PD)	10 DOS UTILITIES: DUPDSK; 400KDISK; INVIS; WAIT; DISKTIME;
			DRIVESPEC; DAZZLER; CAPSOFF; CAPSON; BORDER; CTYPE.
	10073	SFX.EXE (PD)	GREAT DISK/FILE MANAGEMENT PROGRAM
	10074	DIRMAGIC (PD)	GREAT ALTERNATIVE TO DOS "DIR" W/ADDED FEATURES
	10078	SECURE (PD)	PASSWORD PROTECTION FOR COMPUTER & PROGRAMS
	10079	UTILITY PROGRAMS (PD)	2 PROGRAMS: BIGD.EXE & DISKINFO.EXE
	10080	EATERS (PD)	JOKE UTILITY THAT EATS SCREEN
	10081	FRED (SW)	FULL SCREEN FILE EDITOR
	10082	VIRUS DETECTOR (SW)	VIRUS DETECTOR
	10083	VIRUSCAN (SW)	IDENTIFIES 41 MAJOR VIRUS STRAINS
	10084	AT LAST (SW)	POP-UP PROGRAMMER'S UTILITY
		10. 20	

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
UTILITY	10085	SLICE AND SPLICE (PD)	SPREAD LARGE DOS FILE OVER MORE THAN ONE DISK
	10086		ON LINE UTILITY FOR QUICK REFERENCE
		PRICON (SW)	PRINTER SETUP UTILITY
		SENTRY (SW)	VIRUS PROTECTION PROGRAM
	10089	SERVICE STOCK STOC	REQ. IBM OR EPSON DMP, BUT HAS SOURCE CODE
	0.5 (20%) 5550	KEEPER (PD)	RE-EXECUTE LAST 10 DOS COMMANDS
		SETUP (PD)	SELECT & TRANSMIT PRINTER CODES FROM PROGRAMS
		READONLY (PD)	SET FILES FOR READ-ONLY OR READ/WRITE
		BAC BACKUP DIRECTORY (PD)	FILE SPECIFIC BACKUP UTILITY
		LHARC (PD)	ARCHIVING UTILITY FROM JAPAN
	FE-2005-247	FF (PD)	SEND TOF FROM PC TO PRINTER
	OTDOS/SOCIOEES	CDIR (PD)	FULL COLOR HD OR FLOPPY DISK DIRECTORY
		COVER (PD)	DIR PRINT UTILITY TO PLACE ON DISK OR JACKET
		LOOZ (PD)	EXTRACTOR FOR ".ZOO" ARCHIVED FILES
		VISIBLE::SETUP (SW)	DEVELOPERS' INSTALLATION UTILITY FOR DOS APPLICATIONS.
			REQ: 512K, DOS 3.1, OR WINDOWS 3.X
	10108	STAR MENU (SW)	COLORFUL EASY TO SETUP AND USE MENU SYSTEM.
		ORGANIZE:FOR WINDOWS (SW)	THE PIM, PERSONAL INFORMATION MANAGER. REQ: 286 OR BETTER;
		**************************************	EGA, VGA, OR SVGA; & WINDOWS
	10126	NUMDIR (SW)	HARD DISK MANAGEMENT PROGRAM, VIEW DIRECTORIES, TEXT, DO DOS
		2000 House The Country of Recognition	OPERATIONS OR RUN PROGRAMS BY THE NUMBERS. REQ: 128K RAM,
			DOS 3.0 +, ONE DISK DRIVE, & MGA, HERCULES, CGA, EGA OR VGA
	10138	REBEEP (FREEWARE)	AUDIBLE BATCH FILE TERMINATION UTILITY USED AS LAST ENTRY IN
			.BAT FILE
	10143	TEXTCON (SW)	PROGRAM FOR CONVERSION OF ASCII FILES BTWN WORD PROCESSORS
	10144	PROINDEX (SW)	CREATES AN INDEX FROM ANY TEXT FILE
	10155	MKPROMPT (PD)	PROGRAM TO CUSTOMIZED YOUR DOS PROMPT
	10157	PSEARCH (SW)	FILE FIND & TEXT SEARCH UTILITY
	10158	AMBER.COM (PD)	TURNS SCREEN LETTERS TO AMBER
	10160	ARC (SW)	FILE ARCHIVER & COMPRESSOR
	10161	WAITUNTL (PD)	WAIT UNTIL A PATICULAR TIME TO TRIGGER EVENTS IN .BAT FILE
	10162	VALIDATE	CHECK SHAREWARE & OTHER SOFTWARE FOR SIGNS OF TAMPERING
	10163	PAK16 (SW)	CREATE & MAINTAIN FILE ARCHIVES IN COMPRESSED FORM
	10165	INKEY (SW)	HANDY TOOL FOR BATCH FILES
	10168	PD SIDEWAYS (PD)	PRINT SIDEWAY ON EPSON PRINTER ON LPT1
	10169	EX.COM (PD)	PROGRAM WHICH ALLOWS NESTED BATCH FILES
	10170	PROMPT (PD)	SCREEN COLOR CHANGE EXAMPLE .BAT FILES
	10171	DMON (PD)	CHANGE YOUR COLOR DISPLAY MONITOR SETUP
	10173	PKZIP (SW)	FILE COMPRESSION & DECOMPRESSION UTILITY
			DISK 1 OF 2
	10174	PKZIP (SW)	DISK 2 OF 2
	10181	PRINTPARTNER	PRINT BANNERS, SIGNS & CALENDARS
		ELFTREE (SW)	INTEGRATED FILE & DIRECTORY MANAGER
	10198	WSSINDEX (SW)	DATABASE W/ALL INFO ABOUT DISK AVAILABLE FROM DIR COMMAND
			DISK 1 OF 2
		WSSINDEX (SW)	DISK 2 OF 2
	10202	MENU IT (FREEWARE)	MENU PROGRAM FOR DOS USING YOUR HARD DRIVE
		DISKTRAK (SW)	UTILITY FOR MANAGING DISKETTES
	10209	DOS HELP (SW)	QUICK REFERENCE FOR DOS HELP FOR DOS v 4.0

CATAGORY	DISK #	PROGRAM NAME	DESCRIPTION
UTILITY	10272	FIND FILE (SW)	FIND A FILE UTILITY
	10276	CSWEEP (PD)	SWEEP LIKE PROGRAM FOR MSDOS LIKE PROGRAM IN CP/M
	10278	HELPDOS (SW)	DOS HELP FOR MSDOS v 2.X THRU 4.0
	10283	TREETOP (SW)	HARD DRIVE DIRECTORY PROGRAM
	10289	CURSOR UTILITIES (SW)	CHANGES CURSOR SIZE, TURNS ON OR OFF
	10292	ALARM CLOCK (SW)	ALARM CLOCK PROGRAM WITH SONG COMPILER. REQ: IBM PC/XT/AT, DOS 2+
	10315	BANNER MAKER (PD)	MAKE YOUR OWN BANNERS
	10317	DOSAMATIC (SW)	POINT & PRESS USER INTERFACE WITH MULTI-TASKING CAPABILITIES
	10329	PROFESSIONAL MASTER KEY (SW)	FIND, ERASE, MAP, UNFORMAT, EDIT UTILITIES
	10331	EPSON FX UTILITIES (SW)	MENU-SELECT 160+ EPSON FX FONTS/FEATURES. DISK #1 OF 2
	10332	EPSON FX UTILITIES (SW)	DISK #2 OF 2
	10334	ALT (SW)	PROVIDES USEFUL NEW FRAMEWORK FOR COMPUTING W/YOUR IBM.
	10335	MASTER MENU (SW)	MENU PROGRAM FOR DOS
	10336	BACKUP/RESTORE (SW)	STAND ALONE BACKUP/RESTORE
			POINT & SHOOT HARD DRIVE MGR
WORD PROCESSOR	10140	MAKE TABLE (SW)	SOFT FONT WIDTH TABLE FOR PC-WRITE
	10195	PC-WRITE (SW)	GOOD WORD PROCESSOR FOR DOS
			DISK 1 OF 3
	10196	PC-WRITE (SW)	DISK 2 OF 3
	10197	PC-WRITE (SW)	DISK 3 OF 3
	10302	MULTIWORD (SW)	TSR OR STAND ALONE THESAURUS

All the programs in this catalog are provided in their standard ready to run form, none are compressed so that you do not have to use any uncompression programs to set up your working files. (SW) Shareware programs which require that you register the program with the author for a fee. (PD) Public Domain programs which do not require any payment to the author. Please order by disk number. All disks are supplied as 5-1/4" 360K or 3-1/2", with few exceptions as noted. Some newer programs are so large that they will only fit on high density disks.

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Computer News PC Product Guide

PROGRAMS	CABLES REQUIRED BETWEEN AB SWITCH and PRINTER
PACK - MS-DOS Version \$ 18.95 (Z) BASIC Program Packer by David Goben.	Printer to Selector Switch 6' M-M \$ 13.49 (Z) Printer to Selector Switch 10' M-M \$ 15.95 (Z) Printer to Selector Switch 15' M-M \$ 18.95 (Z)
MS UTILITIES by David P. Miller \$ 30.00 (Z) Transfer files between TRS/LS DOS disks and MS-DOS disks. Format MS disks on a model 4.	RS232/MODEM CABLES
FLOPPY DISKS \$.38 (Z) 5-1/4 DS/DD 360k. 100% Error Free Lifetime Guarantee with Paper Sleeves, Labels & Read/Write Tabs. American Made - Bulk Platinum Brand by Syncom.	Serial Cable 6 ft. DB-25 M TO DB-25 F \$ 6.95 (Z) Serial Cable 6 ft. DB-25 M TO DB-25 M \$ 6.95 (Z) Serial Cable 3 ft. DB-9 F TO DB-25 M \$ 6.00 (Z) Serial Cable 6 ft. DB-9 F TO DB-25 M \$ 6.95 (Z) NULL MODEM Cable 6 ft DB-25 M TO DB-25 F \$ 6.95 (Z) Connect two computers together.
5-1/4 DS/HD 1.2meg \$.58 (Z) 100% Error Free Lifetime Guarantee with Paper Sleeves, Labels & Read/Write Tabs.	PRINTER CABLES
3-1/2" DS/DD 720k \$.59 (Z) Premium Quality complete with labels, 100% Error Free, Lifetime Warranty. American Made - Bulk Platinum Brand by Syncom.	For PC IBM/Compatible Computers to Parallel Printers. Round 6 ft. Parallel Printer Cable \$ 9.05 (Z) Round 10 ft. Parallel Printer Cable \$ 10.35 (Z)
3-1/2" DS/HD 1.2meg \$.75 (Z) Premium Quality complete with labels, 100% Error Free, Lifetime Warranty. American Made - Bulk Platinum Brand by Syncom.	For Tandy 1000 Computers to Parallel Printers. Flat Ribbon 6' Parallel Printer Cable \$ 12.95 (Z) Flat Ribbon 12' Parallel Printer Cable \$ 15.00 (Z)
5-1/4" TYVEK SLEEVES (25 per pk) \$ 1.25 (W) COLOR CODED DISK LABELS Five Color 5.25 Write-On Disk Labels 10 labels w/10 read-write tabs per sheet 100 per package \$.50 (W)	DISK CLEANING, DUST COVERS 5-1/4" DISK DRIVE CLEANING KIT \$ 4.90 (Z) 3-1/2" DISK DRIVE CLEANING KIT \$ 5.25 (Z) UNIVERSAL PRINTER DUST COVERS \$ 9.75 (Z) For printers up to 16" wide, anti-static vinyl.
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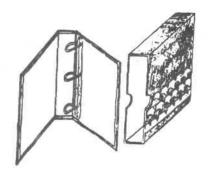






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By Jeff Vavasour

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